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| 10/581,994                | 06/16/2006                   | Masashi Sato         | 128145              | 1879             |
| 25944<br>OLIFF & BERI     | 7590 04/20/201<br>RIDGE, PLC | EXAMINER             |                     |                  |
| P.O. BOX 3208             | 350                          | KOLLIAS, ALEXANDER C |                     |                  |
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## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Application/Control Number: 10/581,994

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## Attachment to Advisory Action

Applicants' amendment filed on 4/5/2010 has been entered Applicants' arguments have been fully considered but are not persuasive for the reasons set forth below.

Applicants argue unexpected results regarding improved compatibility of non-halogenated wire insulation containing zinc sulfide compared to non-halogenated wire insulation compositions which to not contain zinc sulfide. As evidence of improved compatibility, Applicants point to the compatibility results obtained for Comparative Examples 15-17 and Inventive Example 6. However, Applicant's arguments are not found to be persuasive for the reasons set forth below

It is the Examiner's position that the comparison of Inventive Example 6 to Comparative Examples 15-17 is not a proper side by side comparison for the following reasons. In order to elucidate the differences in the inventive and comparative examples, the compositional make-up of these examples from Tables 1 and 4 of the present Specification are reproduced below:

| Composition                | Inventive<br>6 | Comparative<br>15 | Comparative<br>16 | Comparative<br>17 |
|----------------------------|----------------|-------------------|-------------------|-------------------|
| HDPE                       | 50             | 50                | 50                | 50                |
| EVA                        | 50             | 30                | 30                | 30                |
| modified EVA               | 0              | 20                | 20                | 20                |
| magnesium hydroxide        | 90             | 90                | 90                | 90                |
| zinc sulfide               | 5              | 0                 | 0                 | 0                 |
| zinc oxide                 | 0              | 5                 | 0                 | 0                 |
| zinc acrylate              | 0              | 0                 | 5                 | 0                 |
| zinc borate                | 0              | 0                 | 0                 | 5                 |
| acryl silane               | 0.3            | 0                 | 0                 | 0                 |
| phenolic antioxidant       | 2              | 3                 | 3                 | 3                 |
| sulfurous antioxidant      | 1              | 1                 | 1                 | 1                 |
| phosphorous<br>antioxidant | 0.5            | 0                 | 0                 | 0                 |
| metal deactivator          | 1              | 1                 | 1                 | 1                 |
| Cross-linking agent        | 3              | 4                 | 4                 | 4                 |

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total 202.8 204 204 204

Although Inventive Example 6 and Comparative Examples 15-17 comprise equal amounts of HDPE (50 part by weight), it is noted that Comparative Examples 15-17 comprise a 30/20 mixture of EVA and modified EVA while Inventive Example 6 comprises 50 parts of EVA (unmodified). Further differences between the inventive and comparative examples include:

- a. Acryl silane utilized in the Inventive Example 6 in amounts of 0.3 parts is not present in Comparative Examples 15-17
- b. Inventive Example 6 comprises 0.5 parts phosphorous antioxidant, while Comparative Examples 15-17 do not contain phosphorous antioxidant.
- c. Inventive Example 6 and Comparative Examples 15-17 contain varying amounts of phenolic antioxidant and cross-linking agent, i.e., Inventive Example 6 contains 2 parts and 3 parts of phenolic antioxidant and cross-linking agent, respectively, while Comparative Examples 15-17 contain 3 parts and 4 parts of phenolic antioxidant and cross-linking agent.

Further it is noted that the present claims recite that the composition comprises 30 to 250 parts metallic hydrate, 1-20 parts zinc sulfide, 0.3 to 10 parts of an organofunctional coupling agent, and 5 parts zinc sulfide,. However, Inventive Example 6 comprises 30 parts of a specific metal hydrate, magnesium hydrate and 0.3 parts of specific organo-functional coupling compound, acryl silane. Thus, given that the claims recite a generic metal hydrate and coupling agent, and given that Inventive Example 6 contains specific metal hydrate, i.e. magnesium hydrate and specific silane coupling

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agent, i.e., acryl silane, Inventive Example 6 is not commensurate in scope with the scope

of the present claims.

Finally, as noted above, Inventive Example 6 contains singular amounts of zinc

sulfide, silane coupling agent, and magnesium hydrate while the present claims recite

amounts of 30 to 250 parts, 1 to 20 parts, and 0.3 to 10 parts of each respectively.

As set forth in MPEP 716.02(d), whether unexpected results are the result of

unexpectedly improved results or a property not taught by the prior art, "objective

evidence of nonobviousness must be commensurate in scope with the claims which the

evidence is offered to support". In other words, the showing of unexpected results must

be reviewed to see if the results occurred over the entire claimed range, In re Clemens,

622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980). Applicants have not provided

data to show that the unexpected results do in fact occur over the entire claimed range of

metal hydrate, zinc sulfide and silane coupling agent.

4/15/2010

Alexander Kollias

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Examiner, Art Unit 1796

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